ABSTRACT:

An optical head (1) for scanning optical record carriers (2) is provided with a compensator (16) for compensating spherical aberration of the objective system (18) or defocus of the collimator lens (14) caused by operation of the optical head at a temperature different from the design temperature. A surface of the compensator (16) comprises a phase structure in the form of annular areas (52, 53, 54), the areas forming a non-periodic pattern of optical paths of different length. The optical paths change as a function of temperature and form a temperature-dependent wavefront deviation that compensates the spherical aberration and/or defocus.

Fig. 1

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